

E X H I B I T D

8. (Amended) [Control system for] Torque estimation system for estimating an input torque to be used in controlling an automatic transmission, [with torque converter] comprising:

first output torque estimating unit for estimating [an] a first input-torque of said automatic transmission using an engine torque characteristic;

second input torque estimating unit for estimating [a] a second input-torque of said automatic transmission using a torque-converter characteristic;

deviation calculating unit for calculating a deviation of said first estimated input-torque and said second estimated input-torque; and

correcting unit for correcting said first estimated input torque using said deviation [torque;]_

[control unit for controlling said automatic transmission according to said correction first input torque.]

9. (Amended) [Control system for an automatic transmission with torque converter as defined in] Torque estimation system according to claim 8 [wherein], further comprising:

output torque estimating unit for estimating an output torque of said automatic transmission using said [correcting] corrected first estimated input torque and a transmission ratio.

10. (Amended) [Control system for an automatic transmission with torque converter as defined in] Torque estimating unit according to claim 9 [wherein], further

comprising:

acceleration estimating unit for estimating a vehicle acceleration;

[flat road] running load estimating unit for estimating a [flat road] running load using a vehicle speed, said acceleration and said output torque.

11. (Amended) [Control system for an automatic transmission with torque converter as defined in] Torque estimating unit according to claim 10 [wherein], further comprising a transmission ratio control unit for controlling a transmission ratio of a vehicle according to said [flat road] running load.